

# **ANALYZE OF SOIL QUALITY INDEX IN RUBBER PLANTATION, TLOGO TUNTANG, SEMARANG**

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## **ABSTRACT**

Soil Quality defined as capacity of soil to works in an ecosystem which relate to carrying capacity for plants and animals, prevention of erosion, and reduction of negative effects on water and air resources. This study was conducted in Tlogo Plantation, Tuntang Subdistrict, Semarang Regency, which has several blocks of rubber plants with different plant ages. The purpose of this study was to compare soil quality based on soil quality index in various blocks of rubber plants with differences plant age. The method of this study use the calculation of soil quality index by Mausbach and Seybold's criteria (1998) with modifications. Composited did for soil sampling, then analyzed in the laboratory on texture, volume weight, porosity, organic C-, pH, available P, K-exchange, N-total and measured of effective depth. The result showed the diversity of soil quality index, the block of immature plants aged 7 years has grade 0.546; block of plants produced aged 12 years has grade 0.536; block of plants produced aged 14 years has grade 0.594; block of plants produced aged 23 years has grade 0.485; and block of plants produced aged 31 years has grade 0.497. The soil quality index value in all blocks of rubber plantation land is included in the medium criteria.

**Keywords** : soil quality, rubber plantations, plant age